

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 030048095WO	<b>FOR FURTHER ACTION</b>	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US03/26403	International filing date ( <i>day/month/year</i> ) 20 AUGUST 2003 (20.08.2003)	(Earliest) Priority Date ( <i>day/month/year</i> )
Applicant THE BOEING COMPANY		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the Report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (See Box II).

4. With regard to the title,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the abstract,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. 5



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/26403

## Box III TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

Methods and systems for detecting icing or incipient icing conditions external to a vehicle (100) are disclosed. An apparatus in accordance with one embodiment of the invention includes a temperature sensor (120) configured to direct a first signal corresponding to a temperature of an airstream, and a water content sensor (130) configured to direct a second signal corresponding to a water content of the airstream. A processing unit (140) can receive the first and second signals and, based on at least the first and second signals, provide an indication (150) when at least the first and second signals taken together correspond to an at least incipient icing condition. Accordingly, the system can be installed on aircraft to provide notice to the crew of incipient or existing icing conditions.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/26403

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G08B 21/00, 19/02; G01W 1/00  
US CL : 340/962, 945, 580, 581; 73/170.26, 170.17

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 340/962, 945, 580, 581; 73/170.26, 170.17

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,874,672 A (GERARDI et al) 23 February 1999, col. 5, lines 19-29; col. 6, lines 39-50; and col. 14, lines 50-52.	1-26
Y	US 6,140,942 A (BRAGG et al) 31 October 2000, col. 1, lines 52-60; col. 3, lines 5-18.	1-26

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"B" earlier application or patent published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

Date of mailing of the international search report

17 August 2004 (17.08.2004)

02 SEP 2004

Name and mailing address of the ISA/US

Authorized officer

Mail Stop PCT, Attn: ISA/US  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Phung Nguyen

Telephone No. 703-308-6252

Facsimile No. (703)305-3230

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**INTERNATIONAL SEARCH REPORT**

PCT/US03/26403

**Continuation of B. FIELDS SEARCHED Item 3:**

**EAST**

Search term: detecting icing , aircraft, temperature sensor, water content sensor, pressure sensor, indicator, display.

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